

# **EGREMONT BOARD OF HEALTH**

## **Regulations on Outdoor Wood Burning Boiler**

### **Section 1. Findings and Purpose**

Whereas outdoor wood burning boilers have been shown, because of their design, to emit significantly high quantities of particulate matter and other noxious fumes; and

Whereas health, safety and nuisance problems have arisen from the use of these boilers; and

Whereas poor management and poor fuel exacerbate the effects of the smoke created by the firing of these units;

The Board of Health of the Town of Egremont, pursuant to Section 31 of the Chapter 111 of the Massachusetts General Law, hereby adopts these regulations in order to minimize the human health hazards resulting from the smoke of noxious fumes emitted by outdoor wood burning boilers, to encourage proper techniques in the use and location of these boilers, and to promote the public comfort and convenience.

These regulations shall be effective February 1, 2008.

### **Section 2. Definitions**

- a) Outdoor Wood Burning Boiler: a wood fired boiler surrounded by a water jacket, in an insulated freestanding shed with a smoke stack and used to heat water that is carried by underground pipes to provide heat and hot water to a building.
- b) Wood fuel: Trees, cordwood, logs, lumber, sawdust, and wood from manufacturing processes (butt offs, shavings, turnings, sander dust) wood pellets, slabs, bark, chips waste pallets. This definition DOES NOT include materials chemically treated with any preservative, paint or oil.
- c) Seasoned wood: wood that is not green and is substantially dry.

### **Section 3. Requirements**

- A. A permit is required from the Board of Health to install an outdoor wood burning boiler. The permit process shall include submission of a written application form and payments of the permit fee established by the Board. In addition permit applicants must demonstrate to the satisfaction of the Board of Health that they understand the requirements for proper installation and operation of an outdoor wood burning boiler. The application must be accompanied by a map indicating proposed boiler location in relation to other buildings and separating distances from boiler to all buildings and

outbuildings on site and all neighboring houses within 600 feet, together with distances to all roads adjacent to site, and distances from boiler to woods, brush and flammable structures.

- B. Boilers must measure at least 20 feet from bottom of unit to top of smokestack.
- C. If boiler is installed within 50 feet of any house it must have a smokestack tall enough to clear windows of said building.
- D. No boiler shall be installed within 500 feet of any other house or 200 feet from property line.
- E. Boilers located between 500 and 600 feet of a house other than the one being served must have a smokestack height of at least 50% of the height of the eaves lines of the highest abutting residence plus 2 feet.
- F. Boilers located within 600 feet of another house may only be operated during the heating season, what shall for the purpose of these regulations be September 1 to June 1, with the exception of days of unseasonable weather.
- G. Boilers must be UL listed, meet current EPA Phase 1 standards and boiler owners must follow manufacturer's recommendations for the installation and use.
- H. Only substantially dry, seasoned, untreated wood fuel may be burned in the boiler unit.
- I. Boilers installed before the effective date of these regulations shall be exempt from Sections 3 A,B,C,D, E, of these regulations. However, the Board of Health shall have the right to take appropriate enforcement or other action, in accordance with Chapter 111 of the General Laws, with respect to any such boiler that it determines constitutes a nuisance.
- J. The Board of Health may require all Outdoor Wood Burning Boilers to have an annual permit to operate issued by the Board of Health. The permit process shall include submission of a written application form and payments of the permit fee established by the Board.
- K. The Board of Health may grant a variance to the property line, neighboring home and stack height requirements. If a variance is requested abutting property owners will be notified and a hearing will take place for full review.

#### Section 4. **Penalties**

Any violation of these regulations shall be punished by the following penalty: first violation BOH will issue a warning letter, second will be a fine of \$25 for offense. Each day of violation shall constitute a separate offence. Any succeeding day of violation shall be punished by a penalty of up to \$250 per day of offense.

**TOWN OF EGREMONT BOARD OF HEALTH  
OUTDOOR WOOD BURNING BOILER  
INSTALLATION AND OPERATION PERMIT  
APPLICATION**

Fee: \$100.00

Name: \_\_\_\_\_ Telephone#: \_\_\_\_\_

Address: \_\_\_\_\_ Map#: \_\_\_\_\_ Lot#: \_\_\_\_\_

Please attach a map indication proposed boiler location in relation to other buildings and separation distances from boiler to all building and out buildings on site and all neighboring houses within 600ft, together with distances to all roads adjacent to site and distances from boiler to woods, brush and flammable structures.

Proposed height of smokestack \_\_\_\_\_ feet.

I have received a copy of the Board of Health regulations regarding outdoor wood burning boilers,

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

CONSTRUCTION PERMIT APPROVAL:

Sign \_\_\_\_\_

Sign \_\_\_\_\_

Sign \_\_\_\_\_

Board of Health Signatures

An inspection must be done and a signature obtained from the Board of Health before the unit is put into use

\_\_\_\_\_  
Health Agent

\_\_\_\_\_  
Date

This permit expires: \_\_\_\_\_.

**OUTDOOR WOOD BOILER OPERATOR AGREEMENT**

I, \_\_\_\_\_, of \_\_\_\_\_  
(name of OWB operator) (location of OWB)

have read the regulations that pertain to the installation of an Outdoor Wood Boiler and have also read the operating instructions supplied by the manufacturer of the unit. If the Board of Health should receive a valid complaint regarding smoke from my unit I agree to temporarily shut down the operation of the unit until the problem associated with the complaint is resolved.

\_\_\_\_\_  
(signature of OWB operator)

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(signature of Board of Health member)

\_\_\_\_\_  
(date)

\_\_\_\_\_  
(signature of witness)

\_\_\_\_\_  
(date)

## So You're Thinking of Purchasing and Installing an **Outdoor Wood Boiler?**

Some Things You Need to Know Before You Do.....

- 1) Before you install an Outdoor Wood Boiler (OWB) you must first apply for a permit. Currently OWBs are regulated in the Town of Egremont and the pending state regulations will supersede these regulations once they are officially approved. We recommend you read these regulations thoroughly and not purchase your OWB until you have completed the permitting process.
- 2) The OWB you would like to install *must* be a Phase 1/EPA approved unit. These units are cleaner burning and have an orange energy tag rating their emission levels.
- 3) If you do not meet the setback requirements in the regulations you may be able to apply for a variance. The variance process involves the Board of Health (BOH) contacting by letter any homeowner within 600' of your proposed installation and inviting them to a public hearing to hear comment on your application. Please understand while you may be very eager to heat your home and hot water with an OWB your neighbors may be less than thrilled with the prospect of the smoke it produces. If there is convincing health objection to your application your request may be denied.
- 4) Application fees are not refundable.
- 5) OWBs are not inexpensive. Currently a Phase 1 boiler costs about \$11,000 and the installation will bring your total costs close to \$15,000. If you have access to free firewood the payback for this investment will be much sooner than if you have to purchase your wood. Count on going through anywhere from three to five cords of wood for a typical heating season (this is a low estimate). Ask yourself how you will get your wood delivered, where you will store it and how you will keep it dry.
- 6) Before making large investments in any new heating system consider making upgrades to your home which would make it more energy efficient. Adding insulation, replacing windows and doors and sealing up other leaky areas around your house may be a less expensive alternative.
- 7) **AND THE MOST IMPORTANT THING YOU SHOULD KNOW.....**under normal conditions, proper installation and normal use the smoke from your OWB should not be a health issue to you and your neighbors. In certain circumstances, like temperature inversions, improper burning of materials, etc., excessive smoke can be generated and complaints filed with the BOH. Valid complaints can result in the removal, temporary shut-down, or upgrade of your unit. This applies to all OWBs whether your application required any variances or whether your unit has been "grandfathered" (installed before permits were required). If you are thinking of installing an OWB in an area where problems may frequently occur (near a major road, at an elevation lower than neighboring properties, or even strained relationship with current neighbors) you may want to reconsider this expensive investment.